

Amendment
Serial No. 09/763,843

Docket No. PHN 17,510

IN THE CLAIMS:

Kindly replace the claims with the following:

1. (Currently amended) A CDMA communication system comprising:

at least one primary station(2) and a plurality of secondary stations (4), the primary station (2) and the secondary stations (4) exchanging CDMA signals (18) via a communication medium (6), the secondary stations (4) each comprising:

a modulator (10) for modulating a respective data signal (16) with a respective code word (14) in order to obtain a respective CDMA signal (18), the modulator being embodied so as to modulate the respective data signal (16) with an initial code word until [[synchronization]] synchronization with the primary station (2) is obtained, the modulator (10) being further embodied so as to modulate the respective data signal (16) with a respective final code word after [[synchronization]] synchronization with the primary station (2) has been obtained, [[characterized in that]] wherein the initial code word is substantially orthogonal to the final code words for every possible time shift of the initial code word.

2. (Currently amended) [[A]] The CDMA communication system according to Claim 1, [[characterized in that]] wherein all symbol values of the initial code word are equal to each other.

3. (Currently amended) [[A]] The CDMA communication system according to Claim 1 [[or 2, characterized in that]], wherein the code words (14) are Walsh-Hadamard codes

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and that the initial code word corresponds to the first row or the first column of the Walsh-Hadamard matrix.

4. (Currently amended) A secondary station (4) for exchanging CDMA signals (18) via a communication medium (6) with at least one primary station (2), the secondary station (4) comprising:

a modulator (10) for modulating a data signal (16) with a code word (14) in order to obtain a CDMA signal (18), the modulator (10) being embodied so as to modulate the data signal (16) with an initial code word until [[synchronization]] synchronization with the primary station (2) is obtained, the modulator (10) being further embodied so as to modulate the data signal (16) with a final code word after [[synchronization]] synchronization with the primary station (3) has been obtained, [[characterized in that]] wherein the initial code word is substantially orthogonal to the final code word for every possible time shift of the initial code word.

5. (Currently amended) [[A]] The secondary station (4) according to Claim 4, [[characterized in that]] wherein all symbol values of the initial code word are equal to each other.

6. (Currently amended) [[A]] The secondary station (4) according to Claim 4 [[or 5, characterized in that]] wherein the code words (14) are Walsh-Hadamard codes and that the initial code word corresponds to the first row or the first column of the Walsh-Hadamard matrix.

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7. (Currently amended) A method of [[synchronizing]] synchronizing a secondary station (4) with a primary station (2), the primary station (2) and the secondary station (4) exchanging CDMA signals (18) via a communications medium (6), the method comprising the steps of:

modulating a data signal (16) with an initial code word (14) in order to obtain an initial CDMA signal (18) and transmitting the initial CDMA signal (18) to the primary station (2) until [[synchronisation]] synchronization with the primary station (2) is obtained,

modulating the data (16) with a final code word (14) in order to obtain a final CDMA signal (18) and transmitting the final CDMA signal (18) after [[synchronisation]] synchronization with the primary station (2) has been obtained,
[[characterized in that]] wherin the initial code word is substantially orthogonal to the final code word for every possible time shift of the initial code word.

8.(Currently amended) [[A]] The method of [[synchronising]] synchronizing a secondary station (4) with a primary station (2) according to Claim 7, [[characterized in that]] wherein all symbol values of the initial code word are equal to each other.

9. (Currently amended) [[A]] The method of [[synchronising]] synchronizing a secondary [[(4)]] station (4) with a primary station (2) according to Claim 7 [[or 8, characterized in that]] wherein the code words are Walsh-Hadamard codes and that the initial code word corresponds to the first row or the first column of the Walsh-Hadamard matrix.